Poa pratensis ssp. alpigena

Alpine meadow grass

Status

Federal status: G5T5 N3N5, Not listed
NH state status: SH, Endangered
ME state status: SU

Population trends are unknown across this species' range. In New Hampshire, a recent sighting is being documented, but all other occurrences are identified as historic. Whether those sites have been revisited in recent decades is unknown. This taxon has been reported, but not properly documented, in Maine.

This species was not addressed in detail by an expert panel, so viability outcomes were not provided. The alpine panel indicated that the alpine communities in which this species occurs are at a B in the Presidentials and a C on the lesser summits, now and into the future. It is expected that recreation impacts will increase in the next 20 years, but so will public awareness, which may mitigate some impacts and maintain the outcomes.

Distribution

Widespread in northern areas, occurring from Greenland and Labrador to Yukon, south to Newfoundland, Magdalen Islands, Prince Edward Island, northern Maine, and alpine regions of the White Mountains.

In New Hampshire, all documented occurrences are considered historic. They were from Thompson and Meserve Purchase, Sargent's Purchase, Cutts Grant, and Bean Grant, all in the WMNF. Arthur Haines reports a recent sighting on the WMNF, but sighting form has not been completed so it is not yet officially recognized and still identified as historic in NH. The taxon has been reported from Maine, but there are no herbarium specimens available to substantiate its occurrences at this time.

Habitat

In New Hampshire, this species uses nutrient poor soils in alpine/subalpine dry-mesic heath and meadow communities.

Habitat features that are important in providing viability of the dry/mesic heath meadow system include those factors associated with exposure to the elements, especially in winter. The key factors are cold, wind, and snow and ice blast. Other factors include dry to mesic moisture conditions, well-drained sites, thin acidic soils, desiccation, and low nutrient tolerant plants. Wind is likely to reduce competition from other species that are not adapted to survive in a harsh environment.

Limiting Factors

Local experts believe that the threats to this species are the same as the threats to the dry/mesic heath meadow system. Human disturbance is the primary threat to the dry/mesic heath meadow system. Hiker pressures to the system include direct trampling along trails and in areas without trails, typically ridges and peaks, where hikers go "view

seeking." As a result, this system is at greater risk on "lesser summits," where use and plants are concentrated in a small area, than in the Presidential Range.

Global warming and acid deposition may be a threat to the dry/mesic heath meadow system, but the threat is uncertain at this time and is likely minor compared to other factors, such as hiker pressures.

Viability concern

All documented occurrences in New England are historic and all occurred on the WMNF. One extant occurrence is being officially documented; it also is on the WMNF. There is potential for populations to be impacted by recreation in the alpine zone, especially on lesser summits.

Management activities that might affect viability

The activity with potential to impact this species that the WMNF has some control over is trampling by hikers. Management that would reduce the density of trails in the alpine zone and help keep hikers on designated trails, especially near "lesser summits," would reduce the potential for trampling.

Trail construction or other development in the alpine zone could affect this species if it would directly impact dry-mesic heath habitat or increase human traffic near suitable habitat. Trail maintenance activities could alter habitat suitability or directly impact individuals.

References

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